

REMARKS

The claims are now 1 and 2.

Support for amendment

The reaction time is disclosed on page 3, lines 18, 19 of the specification. The limit 0.75 is disclosed on the same page, line 12, as preferred lower limit.

The rejection under 35 USC § 103

Original claim 1 was rejected over Warner Lambert Pharmaceutical Co.'s GB 1226318 ('318).

To be sure, the skilled worker would have been aware that it is *desirable* to remove unwanted contaminant byproducts from a composition. Indeed, as pointed out at page 2, lines 30-36 of the instant specification, it was known in the prior art to be *desirable* to reduce the content of 3-dimethylamino-phenyl-propionic acid-ethylester to about 0.1%. However, this does not *ipso facto* translate into the necessary motivation, within the meaning of § 103, to modify '318 to the extent necessary (note the particular limitations of applicants' *method* claims) to obtain this result.

The problem to be solved by GB 1,226,318 is to find a process for the isomerisation of the *cis*-isomer to the *trans*-isomer and the separation of the *trans*-isomer from a mixture of the *cis*- and *trans*-isomer.

The problem to be solved by the presently claimed invention was to find a simple

and inexpensive method for reduction of the amount of the by-product 3-Dimethylamino-2-phenylpropionic acid ethylester which is formed during the synthesis of 2-Dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate.

According to GB '316 the amounts of acid used for separation of the trans-isomer from the cis-isomer are equivalent to the amount of the trans-isomer. According to Claim 1 and Ex. 1 and 2 this corresponds to a molar ratio of acid to the total amount of 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate of approximately 0.35 : 1. Considering the amount of acid equivalents, the resulting molar ratio (mole COOH) : (mole isomeric mixture) of 0.7 : 1. According to GB' 318, page 2, lines 99-107, the use of a greater amount of acid is considered to be disadvantageous, since such greater amount of acid is considered as having no useful purpose and being less economical. The fact that the amount of acid does have an effect in the reduction of the above-mentioned by-product and the influence of the amount of acid used for such reduction are not at all suggested. Since according to '318 it is disadvantageous to use higher amounts of acids it cannot be obvious to use the claimed amounts of 0.75 : 2 (acid : isomeric mixture). Also, according to GB'318 reaction times are to be considered. According to D1, page 2, lines 53 ff., the mixture is heated until a solution results, generally from 5 to 20 min. According to Ex. 1 and 2 this time is 15 min. The skilled person will deduct from this disclosure that the times should be as short as possible. Therefore it cannot be obvious in view of D1 to keep the solutions at a higher temperature for a time much longer than is required for forming a solution.

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It was not have been expected from the prior art, and in particular '318, that the combination of limitations now in the present claims would lead to a concentration of 0.10%. It is the specific conditions of claim1 which produce this particular result, claim 2 having been added for emphasis.

Accordingly, allowance is respectfully solicited.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

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